

REMARKS

This is in response to the Office Action dated August 25, 2008. Claims 1 and 3-19 are pending. Claims 1 and 3-19 stand rejected in the outstanding Office Action. Claims 1, 14 and 19 have been amended.

The rejection of claims 1, 14 and 19 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement, is respectfully traversed. Claims 1, 14 and 19 have been amended to change the term “unitary structure” to “undivided structure”. As can be clearly seen from Figs. 2 and 3 (which are part of the originally filed disclosure), the edge face sealing member has an undivided structure, since all three components 11, 12 and 13 are joined together constituting a single element.

The rejection of claims 1, 14 and 19 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite, is respectfully traversed. The phrase “the final solar cell module” has been deleted from said claims to overcome the Examiner’s rejection.

The rejection of claims 1 and 14 under 35 U.S.C. §103(a), as allegedly being unpatentable over Stein et al. (US 5,071,491) in view of Yoda et al. (US 6,528,718), is respectfully traversed.

Amended claims 1 and 14 now recite “the edge face sealing member having an undivided structure”. This distinguishes the claimed sealing member from the sealing structure of Stein, where three physically separate members, e.g., upper seal 26, lower seal 26 and electrical insulation 27 constitute the “sealing member” according to the Examiner. Moreover, Stein fails to indicate that the various parts are even in contact with each other. For example, it appears in Fig. 7, that the lower seal 26 is not in contact with the member. Therefore, it would not have been obvious to connect all the pieces into one undivided member.

In addition, it is noted that the insulation 27 (indicated by the Examiner as being a part of the edge face sealing member) is clearly a part of the frame 24 and provided thereon.

Amended claims 1 and 14 also recite “wherein the upper sealing region, the lower sealing region and the side sealing region are made of a same material and formed in an integral and continuous manner”. Support for this limitation can be found in Fig. 2 of the specification. Stein fails to teach this feature. Seals 26 and insulation 27 (indicated by the Examiner as constituting the claimed edge face sealing member) are not formed in a continuous manner. As discussed above, it appears in Fig. 7, that the lower seal 26 is not in contact with the unnamed member between the seals 25 and the insulation 27.

Regarding the limitation “there is substantially no gap between the one or more upper and lower sealing regions of the edge face sealing member and the one or more front and back surfaces of at least one of the solar cell module body or bodies, respectively, when the edge face sealing member is captured within at least one of the frame body or bodies while capturing at least one of the solar cell module body or bodies along substantially an entire edge portion perimeter thereof”, the Examiner asserted that 1) Stein teaches that the seals 26 are made of rubber and are flexible and bendable as depicted in Fig. 7 and 2) Yoda teaches a solar cell module (Figs. 3, 4B, 5B) wherein there is substantially no gap between the upper and lower sealing regions (e.g., horizontal regions of rubber adhesive 4) and the front and back surfaces of the solar cell module body (e.g., 1 and 3). The Examiner then concluded that it would have been obvious to one of ordinary skill in the art “to implement the teachings of Stein (flexible edge face sealing made of rubber) and press the upper and lower seals 26 to produce a final solar cell module with no gap therebetween, as taught by Yoda.

It is respectfully submitted that the combination of Stein and Yoda is improper. Stein discloses distinct seals 26 that are disposed between a frame 24 and the solar cell body 25 (Fig. 7). In contrast, Yoda does not teach distinct seals between a frame 51a and solar cell body (1, 3). In Yoda, the solar cell body is directly glued into the frame via adhesive 4. Adhesive 4 is not a distinct seal like seals 26 in Stein. One would not have looked into Yoda to make the seals 26 be flattened when the solar cell is inserted into the frame in Stein's device, since Yoda lacks seals that are similar to the seals 26 of Stein. The Examiner's obvious to try rationale is clearly based on Applicant's own specification as a template for hindsight reconstruction.

In the embodiments presented in the instant application, the edge face sealing member is squeezed (or press-fitted) by the solar cell module body. On the other hand, such an arrangement is not disclosed or suggested in Stein. Fig. 7 of Stein shows that the solar cell module body 25 is fitted into the frame 24 via the seal 26. In this state, the tip end of the seal 26 is not squeezed and leaves a gap, and such a state does not lead to the entirely-adhered state disclosed in Yoda. Even if the teaching of Yoda is applied to Stein, it is not possible to achieve the claimed element.

The rejection of claim 19 under 35 U.S.C. §103(a), as allegedly being unpatentable over Stein et al. (US 5,071,491) in view of Yoda et al. (US 6,528,718) and Hatsukaiwa et al. (US 2003/0034064), is respectfully traversed.

Hatsukaiwa was cited for the limitation of a bottom wall connecting the upper and lower edge face sealing members. However, there is no explicit teaching or suggestion in Hatsukaiwa that "there is substantially no gap between the one or more upper and lower sealing regions of the edge face sealing member and the one or more front and back surfaces of at least one of the solar cell module body or bodies, respectively", as required by claim 19. Hatsukaiwa is

completely silent as to this feature, and Fig. 22 shows gaps between the top and bottom sealing regions and the front and back surfaces of the solar cell module.

For the above reasons, claims 1, 14 and 19 are allowable.

It is respectfully requested that the rejection of claims 3-13, 15-18, all dependent from claim 1 or 14, also be withdrawn.

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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